

CLAIM AMENDMENTS

- Please enter the following amendments to the claims:

Claims 1-21 (cancelled)

22. (currently amended) A nozzle for providing nitrous oxide to an internal combustion engine, the nozzle comprising:

a central fuel injector passage terminating at a first outlet end for passing fuel from a fuel injector therethrough;

an inner annular passage arranged circumferentially around the central fuel injector passage, and terminating at a second outlet end; and

an outer annular passage arranged circumferentially around the inner annular passage, and terminating at a third outlet end;

wherein one or both of the inner and outer annular passages is adapted to pass nitrous oxide therethrough; and

~~The nozzle of claim 1,~~ wherein the second outlet end comprises second outlet castellations.

23. (original) The nozzle of claim 22, wherein the second outlet castellations have a width of between about 0.020 and about 0.100 inches and a depth of between about 0.010 and about 0.040 inches.

24. (original) The nozzle of claim 22, wherein the second outlet castellations have a width of about 0.060 inches and a depth of about 0.024 inches.

25. (currently amended) A nozzle for providing nitrous oxide to an internal combustion engine, the nozzle comprising:

a central fuel injector passage terminating at a first outlet end for passing fuel from a fuel injector therethrough;

an inner annular passage arranged circumferentially around the central fuel injector passage, and terminating at a second outlet end; and

an outer annular passage arranged circumferentially around the inner annular passage, and terminating at a third outlet end;

wherein one or both of the inner and outer annular passages is adapted to pass nitrous oxide therethrough; and

~~The nozzle of claim 1~~, wherein the third outlet end comprises third outlet castellations.

26. (original) The nozzle of claim 25, wherein the third outlet castellations have a width of between about 0.050 and about 0.150 inches and a depth of between about 0.010 and about 0.060 inches.

27. (original) The nozzle of claim 25, wherein the third outlet castellations have a width of about 0.094 inches and a depth of about 0.030 inches.

28. (currently amended) A nozzle for providing nitrous oxide to an internal combustion engine, the nozzle comprising:

a central fuel injector passage terminating at a first outlet end for passing fuel from a fuel injector therethrough;

an inner annular passage arranged circumferentially around the central fuel injector passage, and terminating at a second outlet end; and

an outer annular passage arranged circumferentially around the inner annular passage, and terminating at a third outlet end;

wherein one or both of the inner and outer annular passages is adapted to pass nitrous oxide therethrough; and

~~The nozzle of claim 1~~, wherein the second outlet end comprises second outlet castellations and the third outlet end comprises third outlet castellations,

the second outlet castellations and third outlet castellations being indexed relative to one another.

29. (currently amended) A nozzle for providing nitrous oxide to an internal combustion engine, the nozzle comprising:

a central fuel injector passage terminating at a first outlet end for passing fuel from a fuel injector therethrough;

an inner annular passage arranged circumferentially around the central fuel injector passage, and terminating at a second outlet end; and

an outer annular passage arranged circumferentially around the inner annular passage, and terminating at a third outlet end;

wherein one or both of the inner and outer annular passages is adapted to pass nitrous oxide therethrough; and

~~The nozzle of claim 1,~~ wherein the second outlet end comprises second outlet fingers extending from the second outlet end to an exterior wall of the central fuel injector passage.

30. (currently amended) A nozzle for providing nitrous oxide to an internal combustion engine, the nozzle comprising:

a central fuel injector passage terminating at a first outlet end for passing fuel from a fuel injector therethrough;

an inner annular passage arranged circumferentially around the central fuel injector passage, and terminating at a second outlet end; and

an outer annular passage arranged circumferentially around the inner annular passage, and terminating at a third outlet end;

wherein one or both of the inner and outer annular passages is adapted to pass nitrous oxide therethrough; and

~~The nozzle of claim 1,~~ wherein the third outlet end comprises third outlet fingers extending from the third outlet end to an exterior wall of the inner annular passage.

Claims 31-44 (cancelled)

45. (previously presented) A nozzle for providing nitrous oxide to an internal combustion engine, the nozzle comprising:

a central fuel injector passage terminating at a first outlet end for passing fuel from a fuel injector therethrough;

an inner annular passage arranged circumferentially around the central fuel injector passage and terminating at a second outlet end, the second outlet end comprising a first set of castellations and fingers that extend from the second outlet end and terminating adjacent an outer wall of the central fuel injector passage; and

an outer annular passage arranged circumferentially around the inner annular passage, and terminating at a third outlet end, the third outlet end comprising a second set of castellations and fingers that extend from the third outlet end and terminating adjacent an outer wall of the central fuel injector passage.

46. (original) The nozzle of claim 45, wherein one or both of the inner and outer annular passages is adapted to pass nitrous oxide therethrough.

47. (original) The nozzle of claim 45, wherein the nozzle is adapted to fit between a fuel injector and an engine without substantial modification to the engine.

48. (original) The nozzle of claim 45, wherein at least one of the first set of castellations and the second set of castellations is adapted to encourage tumble flow in fuel and nitrous oxide exiting the nozzle.

49. (original) The nozzle of claim 45, wherein at least one of the first set of castellations and the second set of castellations is substantially perpendicular with the cylindrical axis of the nozzle.
50. (original) The nozzle of claim 45, wherein at least one of the first set of castellations and the second set of castellations is adapted to encourage swirl flow in fuel and nitrous oxide exiting the nozzle.
51. (original) The nozzle of claim 45, wherein at least one of the first set of castellations and the second set of castellations is angled with respect to the cylindrical axis of the nozzle.
52. (original) The nozzle of claim 45, wherein at least one of the first set of castellations and the second set of castellations is adapted to reduce fuel choke-off.
53. (original) The nozzle of claim 45, wherein the first set of castellations and the second set of castellations are indexed relative to one another.
54. (cancelled)
55. (currently amended) A method for providing fluids to an internal combustion engine comprising:  
providing a central fuel injection passage terminating at a first outlet end;  
providing fuel from a fuel injector to an engine through the central fuel injection passage;  
providing an inner annular passage, the inner annular passage being arranged circumferentially around the central fuel injector passage, and terminating at a second outlet end;  
providing additional fuel or nitrous oxide to the engine through the inner annual passage;

providing an outer annular passage, the outer annual passage being arranged circumferentially around the inner annular passage and terminating at a third outlet end; and

providing additional fuel or nitrous oxide to the engine through the outer annual passage; and

~~The method of claim 54~~, wherein the step of providing additional fuel or nitrous oxide to the engine through the inner annual passage further comprises passing the additional fuel or nitrous oxide through a first set of castellations at the second outlet end.

56. (currently amended) A method for providing fluids to an internal combustion engine comprising:

providing a central fuel injection passage terminating at a first outlet end;

providing fuel from a fuel injector to an engine through the central fuel injection passage;

providing an inner annular passage, the inner annular passage being arranged circumferentially around the central fuel injector passage, and terminating at a second outlet end;

providing additional fuel or nitrous oxide to the engine through the inner annual passage;

providing an outer annular passage, the outer annual passage being arranged circumferentially around the inner annular passage and terminating at a third outlet end; and

providing additional fuel or nitrous oxide to the engine through the outer annual passage; and

~~The method of claim 54~~, wherein the step of providing additional fuel or nitrous oxide to the engine through the outer annual passage further comprises

passing the additional fuel or nitrous oxide through a second set of castellations  
at the third outlet end.

Claims 57-69 (previously cancelled)

Claims 70-77 (cancelled)